

Terminal Flight Data Manager (TFDM)

Program Overview

FAA Terminal Program Industry Day Briefing

**Michael Huffman,
TFDM Program Manager**

Day 1



**Federal Aviation
Administration**



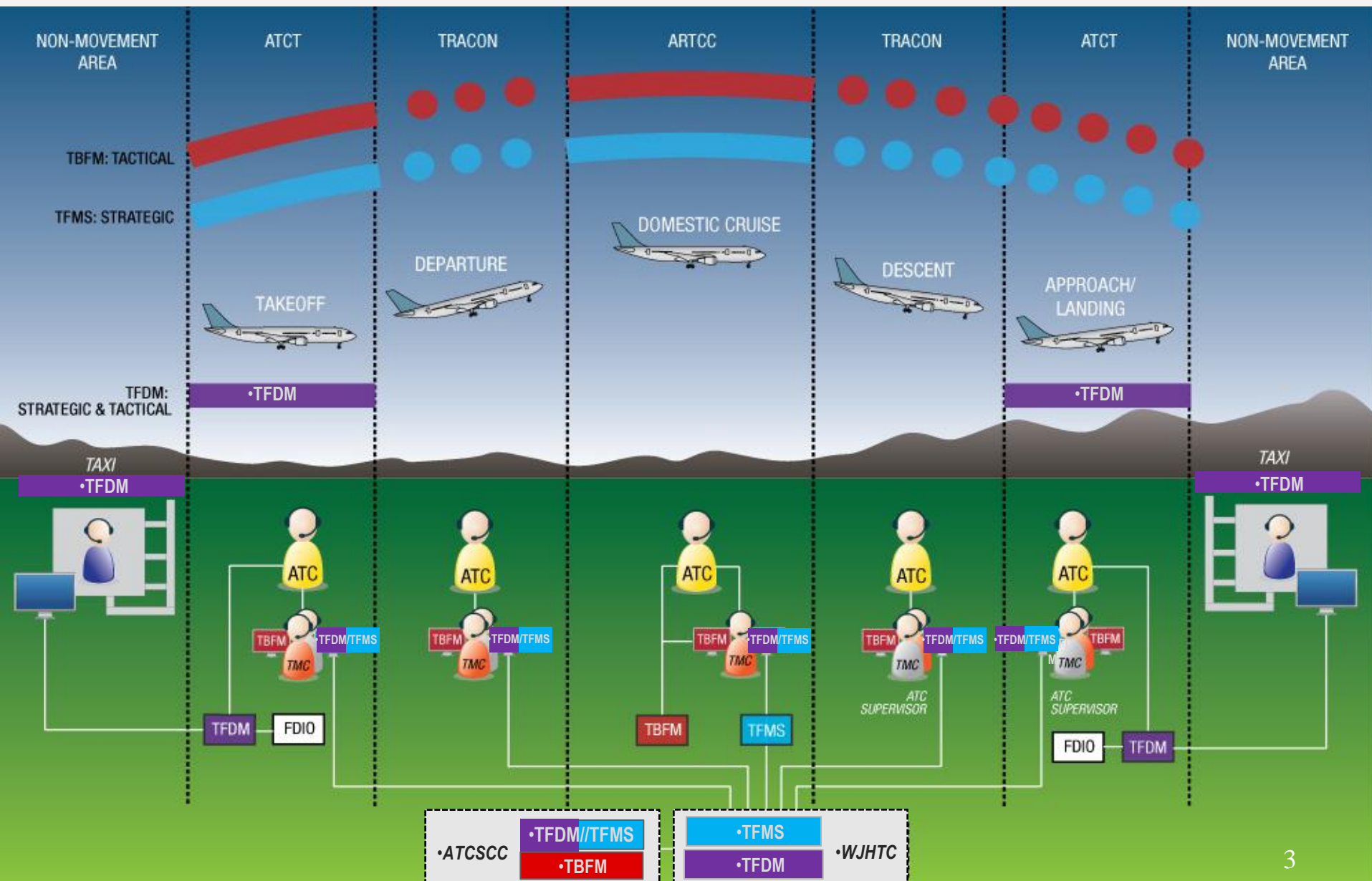
Terminal Flight Data Manager

**Michael Huffman,
TFDM Program Manager**

- **TFDM Description**
- **High-level Benefits**
- **Milestones**
- **Implementation Activities**
- **Artifacts**
- **Specifications**
- **Questions**



Decision Support Systems



TFDM Description

TFDM will provide efficiencies in the airport surface and terminal airspace by providing new integrated surface traffic control and management capabilities, including:

S-CDM	Surface collaborative decision making (S-CDM), including departure scheduler, departure metering, and other airport decision tools
EFD	Electronic Flight Data and Electronic Flight Strips in the Tower
TFM	Enhanced Air Traffic Control Tower (ATCT) Traffic Flow Management
Systems Consolidation	Replacement or subsumption of multiple systems in the National Airspace System (NAS)

TFDM Benefits

EFD	S-CDM
TFM	Systems Consolidation

Connected stakeholders.

Exchange data electronically to make more informed tactical decisions



Handle changing traffic volume, weather, and other evolving situations

Collaborative decisions.

Immediate stakeholder access to digital flight plans, shared surveillance data, and collaborative decision-support tools.



Save time and fuel, reduce emissions, improve passenger experience

Real-time accuracy.

Accurate real-time data from surface and terminal



Decrease taxi time, fewer missed connections

TFDM Benefits

EFD

S-CDM

TFM

Systems
Consolidation

Better predictive tools.

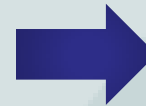
Surface surveillance and flow-management capabilities
predictive modeling



Improve departure management, ground movement, and flight coordination.

Environmentally friendly.

Reduced taxi times, fewer delays and missed connections, and greater predictability



Save fuel and reduce emissions

Taxpayer savings.

Multiple costly legacy systems will be replaced



Create single, easily maintained state-of-the-art platform

TFDM Milestones

- Achieved Investment Analysis Readiness Decision (IARD) September 2010
- Achieved Initial Investment Decision (IID) March 2014
- Planned Final Investment Decision (FID) 2015

FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
Sep 15, 2010 Investment Analysis Readiness Decision		Aug 15, 2012 JRC Approval of Revised Scope, Goals and Schedule		March 19, 2014 Initial Investment Decision	FY2015 Final Investment Decision

Program Development and Implementation Activities (Notional)



2016	Requirements Review
2016-2017	System Design
2017 – 2019	System Development, Integration and Testing
2019 – 2026	Implementation Activities to Include: Engineering Services, Site Support, and 2 nd Level Support

TFDM Requirements Artifacts



Internal FAA

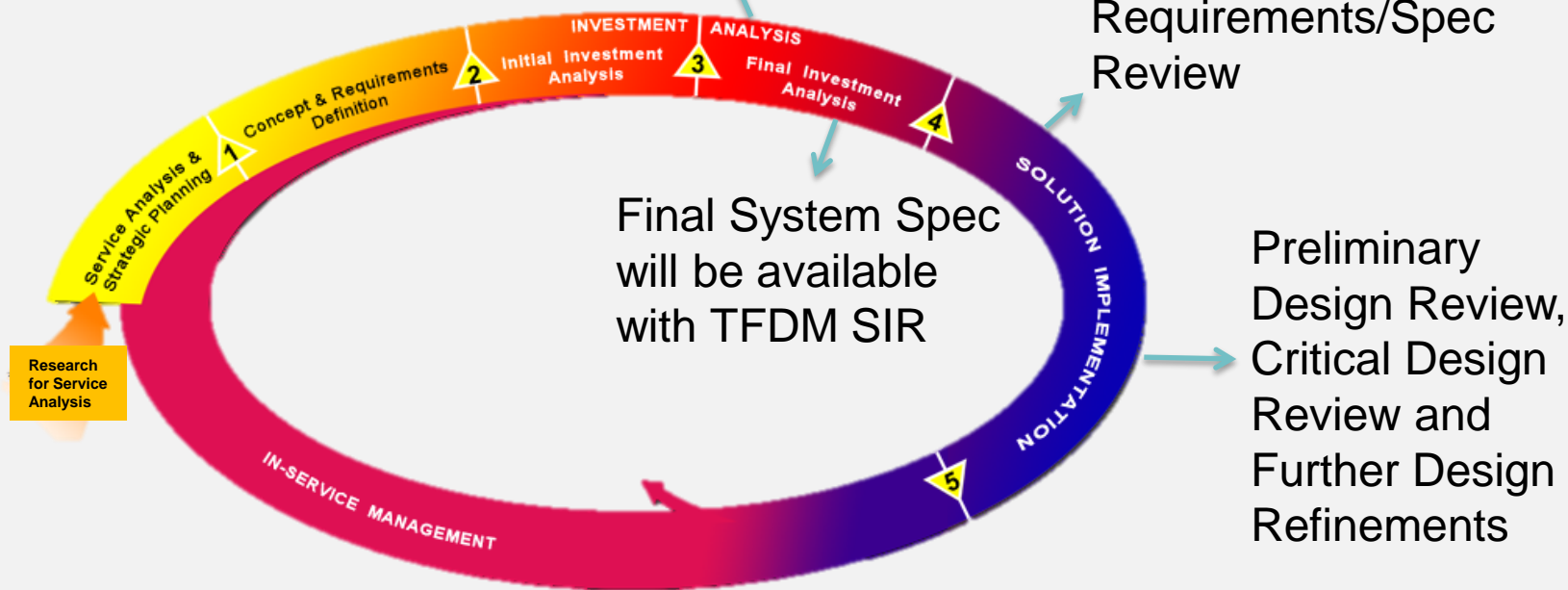
- **FPRD:** Final program requirements document
- **CONOPS: Concept of Operations**

FAA Contracts

- **SSD:** System level requirements
- **IRD:** Describes data elements being exchanged
- **CHI Spec:** Specification for display

TFDM Specifications

RFI #3 includes **DRAFT** System Specifications; should be used for guidance, only



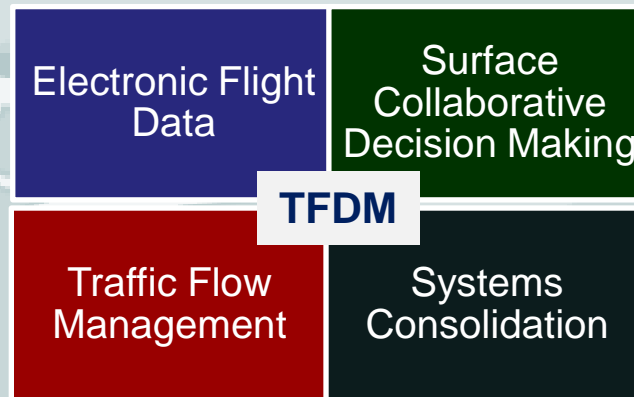
TFDM and the Flying Public

- More predictable air travel
- Reduced taxi time and time spent on tarmac
- Less missed connections

TFDM and the Environment

- Decrease in aviation-related environmental impact through reduced fuel consumption and emissions

Questions



Thank you